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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,335	09/19/2005	Noriyuki Kanno	05-212	3638

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BACHMAN & LAPOINTE, P.C.  
900 CHAPEL STREET  
SUITE 1201  
NEW HAVEN, CT 06510

EXAMINER
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BEAUCHAINE, MARK J

ART UNIT	PAPER NUMBER
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3653

MAIL DATE	DELIVERY MODE
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08/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/525,335	<b>Applicant(s)</b> KANNO ET AL.	
	<b>Examiner</b> Mark J. Beauchaine	<b>Art Unit</b> 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The terms "inactive [condition]" (claim 12, line 21), and "active condition" (claim 12, line 21) lack sufficient antecedent bases.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-14 and 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO Publication Number WO 92/09057-A1 by Barnes et al ("Barnes") in view of Patent Number 4,784,274 by Mori et al ("Mori") in view of Patent Number 3,266,060 by Springer ("Springer"). The valuable paper discrimination device disclosed by Barnes comprises inlet 7, passageway (see Figure 4A), validation sensor

21 for detecting an optical pattern of paper moving through said passageway and producing detection signals, stacking device and accumulation chamber (see page 66, lines 7-15), drive controller/self-holding circuit 11, and battery 14 (see page 8, lines 5-9).

Barnes further discloses trigger element/inlet sensor 21 for producing a pulse and switching a self-holding circuit between active and inactive conditions for interrupting a power supply (see page 13, lines 11-31), and shutoff circuit for switching said self-holding circuit to the inactive condition (see page 14, lines 11-21). The passage of dark current through an optical sensor circuit is an inherent condition when said optical sensor is deactivated. Barnes further discloses a timer for counting the time elapse since the trigger element is turned on and switching said device from the active to inactive condition after the counter has counted a predetermined period of time (see page 14, lines 14-19).

Still further, Barnes discloses a first switching element connected in series between the battery and drive controller 11 and in parallel to the trigger element 21 (see Figure 5), and a second switching element 19 connected to a control terminal of the first switching element, wherein a control terminal of the second switching element is connected to the trigger element and shutoff circuit. Barnes also discloses an infra-red ray sensor for detecting a human body (see page 18, lines 9-13) for detecting a human body, and an AC power source converter (see page 65, lines 3-6; and page 68, lines 23-28).

Barnes fails to disclose a conveyor for transporting said valuable paper to a stand-by position. Mori teaches a valuable paper discrimination device comprising

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conveyor 6 for transporting said paper to stand-by position 2, 3 (see column 5, lines 38-45) for the purpose of preventing the removal of papers being processed. Mori further teaches said conveyor being rotated in the adverse direction when the controller does not decide the paper inserted from the inlet 1 is genuine (see column 5, lines 45-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the conveyor/stand-by position configuration of Mori into the device of Barnes for the purpose of preventing the removal of papers being processed.

Barnes fails to disclose a stack sensor. Mori teaches stack sensor SW1 for detecting paper stowed in paper accumulation chamber 12 to produce a detection signal (see Figure 1, column 4, lines 35-55) for the purpose of controlling the sheet-feeding operation of the device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the stack sensor of Mori into the device of Barnes to control the sheet-feeding operation of the device.

Barnes fails to disclose a cover-actuated trigger element. Springer teaches an article accepting device comprising trigger element 71 that is turned on by the opening of cover 32 that is mounted adjacent to inlet 30 (see Figure 2 and 3, and column 5, lines 5-39) for the purpose of impelling matter into the device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the cover/trigger configuration of Springer into the device of Barnes for the purpose of impelling matter within the device.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barnes in view of Mori in view of Springer as applied to claim 12 above, and further in view of Patent Number 3,971,464 by Seversen ("Seversen"). Barnes/Mori/Springer fails to disclose a thyristor/gate terminal configuration. Seversen teaches a token actuated device comprising a self-holding circuit comprising thyristor 32; trigger element 2 is connected to gate terminal 3 of the thyristor (see Figure 2 and column 3, lines 34-52) for the purpose of effecting switch operations of the device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the thyristor configuration of Seversen into the device of Barnes/Mori/Springer for the purpose of effecting switch operations of the device.

### ***Response to Arguments***

Applicant's arguments with respect to claims 12 -21 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark J. Beauchaine whose telephone number is (571)272-6934. The examiner can normally be reached on 8:00AM through 5:00PM Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mjb

  
PATRICK MACKEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600